

chipped flint. Fire transported from the hearth to the furnace brought the metals into his service. Copper, tin and zinc were blended into bronze and brass : iron was not more refractory but in Asia and Europe was a later discovery. Carbonized iron (steel) of good quality could be produced by simple appliances if used with skill. To steel-edged tools most materials are submissive : the blacksmith could work in iron, the carpenter in wood, the mason in stone, and could elaborate ornamental embellishments which in some countries were brought to a high pitch of artistic excellence. But the motive power was man's own strength : manufacture was by handicraft. Only a century and a half has passed since the discovery was made that by the burning of coal energy could be evolved which could employ tools with infinitely more efficiency than was attainable by human muscle, so that man, having once harnessed this power to his machinery, could stand aside and watch the achievements of the *inn* he had enslaved.

Dress originated in an idea not of decency or of warmth, but of ornament. It has accordingly been the practice of almost all races of men partially to undress themselves as a sign of respect. Orientals uncover the feet, Europeans the head. It is related of the Sultan of Meli that he would permit no women to enter his presence until they had discarded all their clothing : and ladies may

not be presented at the royal courts of Europe unless they are clad in *decollete* fashion. Amongst uncultured peoples beads are often more prized than clothing, and their women are loaded with necklaces when scarcely provided with a garment. Civilized nations, under the promptings of reason, have discovered the protective value of clothes : they have also strayed into